Application No.: <u>10/520,711</u> Attorney's Docket No.: 1022702-000262

Page 8

REMARKS

Generally

Claims 31 and 34-61 remain pending in the present application. In this Response, claims 31, 34-36, 42, 45, 52, and 54 have been amended, claims 32 and 33 have been cancelled, and new independent claim 61 has been added. Exemplary support for the claim amendments can be found throughout the specification and claims as originally filed. See, for example, page 4, lines 7-9 of the present specification. It should be noted that claims 56-60 remain withdrawn pursuant to the Restriction Requirement dated October 2, 2008.

Applicants respectfully request the Examiner to reconsider and withdraw the outstanding rejections in view of the foregoing amendments and the following remarks.

Rejection under 35 U.S.C. § 112

Claims 31, 33, 49, 50, and 52 have been rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite. Applicants respectfully submit that claims 31 and 52 have been amended for clarity and claim 33 has been cancelled. With regard to claims 49 and 50, Applicants respectfully submit that monomers recited in claims 49 and 50 are believed to be specific examples of the monomer generically represented by formula (I) in claim 46 from which both claims 49 and 50 indirectly depend. See, for example, page 10, lines 1-5 of the present specification. In view of at least the foregoing, Applicants respectfully request that the rejection under 35 U.S.C. § 112, second paragraph, should be withdrawn.

Rejections under 35 U.S.C. § 103

Claims 31 and 37-41 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over U.S. Patent No. 4,067,758 (hereinafter "Sommer") in view of Nikiforov, A.P., "Rheological and physicomechanical properties of heavy concrete with additions of a melt of carboxylic acid," Chemical Abstracts, vol. 120, No. 16, Columbus, OH; Abstract No. 1988874a; Apr. 1994 (hereinafter "Nikiforov"). Claims 31 and 34 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Sommer in view of U.S. Patent No. 5,792,252 (hereinafter "Sprouts"). Claim 36 has been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Sommer and Sprouts, further in view of U.S. Patent No. 4,090,882 (hereinafter "Rauschenfels"). Claims 32, 35, 42-44, and 55 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Sommer and Nikiforov, further in

Application No.: <u>10/520,711</u> Attorney's Docket No.: <u>1022702-000262</u>

Page 9

view of U.S. Publication No. 2002/0077390 (hereinafter "Gonnon"). Claims 45-53 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Sommer and Nikiforov, further in view of U.S. Patent No. 6,461,425 (hereinafter "Brown"). Claims 33 and 54 have been rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Sommer and Nikiforov, further in view of Rauschenfels. These rejections are respectfully traversed.

Legal Standards

The Office has the initial burden of establishing a factual basis to support the legal conclusion of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). For rejections under 35 U.S.C. § 103(a) based upon a combination of prior art elements, in *KSR Int'l v. Teleflex Inc.*, 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007), the Supreme Court stated that a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006).

It should be noted that the presently pending independent claims 31 and 61 recite the transitional phrase *consisting essentially of*. Applicants respectfully submit that the Examiner must accord patentable weight to "consisting essentially of" which limits the scope of a claim to the specified materials or steps "and those that do not materially affect the basic and novel characteristic(s)" of the claimed invention. *In re Herz*, 537 F.2d 549, 551-52, 190 USPQ 461, 463 (CCPA 1976). Thus, Applicants respectfully submit that the presently recited compositions require either (i) and (ii) (i.e., claim 61) or (i), (ii), and (iii) (i.e., claim 31) and no other materials that materially affect the basic and novel characteristics of the composition.

Present Claims and Disclosure

Amended independent claim 31 recites a process for manufacturing an article comprising one or more superposed layers each less than 5 centimetres thick, obtained by using a *composition consisting essentially of* (i) a hydraulic binder, (ii) at least one compound which is: an organic compound comprising at least two hydrophilic functions and

Application No.: <u>10/520,711</u>

Attorney's Docket No.: <u>1022702-000262</u> Page 10

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a hydrophobic chain, or a polyamide oligomer comprising less than 20 repeating units, and (iii) and an additive selected from the group consisting of latex, fibres, and a water-soluble amphiphilic copolymer, the process comprising: mixing the composition with water to form the article.

New independent claim 61 recites a process for manufacturing an article comprising one or more superposed layers each less than 5 centimetres thick, obtained by using a *composition consisting essentially of* (i) a hydraulic binder and (ii) at least one compound which is: an organic compound comprising at least two hydrophilic functions and a hydrophobic chain, or a polyamide oligomer comprising less than 20 repeating units, the process comprising: mixing the composition with water to form the article.

Applicants respectfully submit that the present disclosure relates to articles of cement. These articles of cement are either made of (i) a hydraulic binder and of (ii) an organic compound and/or a polyamide oligomer, as recited in new claim 61, or made of (i) a hydraulic binder, (ii) an organic compound and/or a polyamide oligomer, and of (iii) an additive, as recited in claim 31. It should be noted that hydraulic binders are generally cements based on calcium silicates and/or mineral aluminates or plasters based on calcium sulphate used in numerous industries, particularly in the construction field for making the infrastructure of buildings, works of art, apartment buildings or articles such as paving slabs or boards and tiles. (See, for example, page 1, lines 15-21 of the present specification).

Applicants respectfully submit that hydraulic binders may be reinforced with fibres for the manufacture of fibrocements used, for example, as a material for making articles for covering roofs, pipework or tanks. (See, for example, page 1, lines 22-25 of the present specification). Other articles are described, for example, at page 13, lines 5-9 and page 13, lines 17-18 of the present specification. Applicants respectfully submit that such articles of cement or of fibrocement have good mechanical performance and low water absorption. (See, for example, page 2, lines 24-27).

Differences between Cited Art and Present Claims

Sommer discusses mortar with a base of hydraulic binder. (Col. 2, line 28). Applicants respectfully submit that mortar is not the same as cement. Applicants further respectfully submit that Sommer does <u>not</u> disclose or suggest either (ii) or (iii) recited in the present claims.

Application No.: <u>10/520,711</u>

Attorney's Docket No.: 1022702-000262

Page 11

Nikiforov discusses concrete comprising dicarboxylic acids. (Abstract). Applicants respectfully submit that concrete is not the same as cement. Applicants further respectfully submit that Nikiforov <u>not</u> disclose either (i) or (iii) recited in the present claims.

Sprouts discusses cement admixtures containing an alkali metal carbonate and a mono- or di-carboxylate acid or alkali metal salt thereof or an alkali metal salt of a tricarboxylic acid. (Abstract). Applicants respectfully submit that Sprouts does <u>not</u> disclose or suggest either (ii) or (iii) recited in the present claims.

Rauschenfels discusses a building material comprising an inorganic binder selected from the group consisting of Portland cement, alumina cement, calcium silicate, lime and gypsum, structurally reinforced with glass fibers. (Abstract). Applicants respectfully submit that Rauschenfels does <u>not</u> disclose or suggest (ii) recited in the present claims.

Gonnon discusses cement matrices or hydraulic binders including copolymers. (Abstract). Applicants respectfully submit that Gonnon does <u>not</u> disclose or suggest (ii) recited in the present claims.

Brown discusses cementitious dry cast mixtures containing a derivatized polycarboxylate dispersant which is a polymer comprising units derived from at least a substituted carboxylic acid monomer or substituted ethylenically unsaturated monomer. (Claim 1). Brown does <u>not</u> disclose or suggest (ii) recited in the present claims.

Moreover, Applicants respectfully submit that Sommer, Nikiforov, Sprouts, Rauschenfels, Gonnon, and Brown, each require specific components to obtain each of the specific disclosed compositions each having specifically targeted properties. For example, Sprouts requires the addition of an alkali metal carbonate as an essential component of the cement admixture.

In contrast to the cited references, Applicants respectfully submit that the amended independent claim 31 recites, inter alia, a composition consisting essentially of (i) a hydraulic binder, (ii) at least one compound, which is: an organic compound comprising at least two hydrophilic functions and a hydrophobic chain, or a polyamide oligomer comprising less than 20 repeating units, and (iii) and an additive selected from the group consisting of latex, fibres, and a water-soluble amphiphilic copolymer. Again, in contrast to the cited references, Applicants respectfully submit that the new independent claim 61 recites, inter alia, a composition consisting essentially of (i) a hydraulic binder and (ii) at least one compound,

Application No.: <u>10/520,711</u>

Attorney's Docket No.: 1022702-000262

Page 12

which is: an organic compound comprising at least two hydrophilic functions and a

hydrophobic chain, or a polyamide oligomer comprising less than 20 repeating units.

If any combination of the references relied upon the Examiner is used to obtain the presently recited claims, the result will inevitably be a composition which includes other

materials that materially affect the <u>basic and novel</u> characteristics of the composition.

Accordingly, Applicants respectfully submit that none of the cited references disclose or

suggest the presently recited specific compositions. In particular, Applicants respectfully

submit that the cited references, alone or in combination, would not lead one of ordinary skill

in the art who aims to improve mechanical performance and water penetration properties in

articles of cement or fibrocement, to use a composition which consists essentially of (i), (ii),

and (iii) or (i) and (ii).

Conclusion

In light of at least the foregoing, Applicants respectfully submit that the obviousness

rejections should be withdrawn.

Applicants invite the Examiner to contact Applicants' representative at the telephone

number listed below if any issues remain in this matter, or if a discussion regarding any

portion of the application is desired by the Examiner.

In the event that this paper is not timely filed within the currently set shortened

statutory period, Applicants respectfully petition for an appropriate extension of time. The

fees for such extension of time may be charged to our Deposit Account No. 02-4800.

In the event that any additional fees are due with this paper, please charge our Deposit

Account No. 02-4800.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

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